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AUTHOR Miller, Ross

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#### **ABSTRACT**

In conjunction with the preparation of the second draft of the National Panel report of the Greater Expectations National Panel, a panel of the Association of American Colleges and Universities, this paper presents lists of promising practices for higher education change. The first section contains lists of pedagogical and institutional practices to advance student achievement. Pedagogical practices include those that center on complex cognitive development, field-based learning, integrative learning, and assessment. Teaching practices that motivate and challenge students and institutional arrangements to advance achievement are outlined. Section 2 contains a list of pedagogical and institutional practices to advance student achievement in chart form, linked to outcomes from the National Panel's draft report. These focus on the learner who is enabled, informed, and responsible. Section 3 contains some suggestions of pedagogical and institutional practices from sources close to Greater Expectations, including the Greater Expectations Project on Accreditation and Assessment and a selection from "General Education: The Changing Agenda" by Jerry Gaff, published in 199 by the Association of American Colleges and Universities. (SLD)



# Pedagogical and Institutional Practices to Advance Student Achievement

### April 2001 Ross Miller AAC&U

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National Panel Report : Briefing Papers

ASSOCIATION OF AMERICAN COLLEGES AND UNIVERSITIES.

APRIL 2001

**Greater Expectations National Panel** 

## PEDAGOGICAL AND INSTITUTIONAL PRACTICES TO ADVANCE STUDENT ACHIEVEMENT

prepared by Ross Miller, AAC&U

#### Introduction

Draft #2 of the National Panel report is ready for Panel comments. The Panel, however, has not yet had a thorough discussion of pedagogical or institutional practices that could support the aims and purposes that the Panel is likely to propose. While there are thousands of individual, site-specific practices that might be cited, for our discussions it makes sense to generalize to produce lists of promising practices of manageable length. The lists and descriptions that follow are not meant to be comprehensive but are provided as a starting point for discussion.

## SECTION ONE: LISTS OF PEDAGOGICAL AND INSTITUTIONAL PRACTICES TO ADVANCE STUDENT ACHIEVEMENT

#### Pedagogical practices

Complex cognitive development

- research/inquiry-based learning
- frequent analytical and reflective writing
- small group discussions

#### Field-based learning

- service learning
- field trips, apprenticeships
- independent lab work
- discovery learning

#### Integrative learning

- interdisciplinary learning
- team teaching

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#### Assessment for learning

- "authentic" and performance assessments
- use of progress portfolios, presentation portfolios, program portfolios, etc.
- self-, peer-, and teacher assessments with cycles of revision
- goals, experiences, assessment, and grades linked clearly and logically

#### Teaching practices that motivate and challenge

- alternative lecture procedures including writing answers to rhetorical and other questions, holding short discussions with classmates, taking quizzes immediately after material is presented, and storytelling.
- modeling, teaching by example
- teacher gets learners involved in diagnosing needs, establishing goals, and evaluating
- teaching that addresses multiple learning styles: visual, auditory, tactual, kinesthetic, etc.
- various uses of technology: on-line discussions, multi-media presentations, information searches, data analysis, etc.

#### Institutional arrangements to advance student achievement

- freshman-year experiences
- learning communities
- systems that support interdisciplinary teaching and learning
- WAC and other across-the-curriculum practices
- common courses
- capstone courses
- small classes
- graduation and other portfolios, esp. in electronic form
- internship and field experience support
- service learning support
- campus and community volunteer coordination
- faculty rewards system to support the scholarship of teaching, interdisciplinary teaching, etc.
- assessment of institutional student learning goals

## SECTION TWO: PEDAGOGICAL AND INSTITUTIONAL PRACTICES TO ADVANCE STUDENT ACHIEVEMENT LINKED TO OUTCOMES FROM THE NATIONAL PANEL'S DRAFT REPORT

The Enabled Learner: having mastery of analytical and communicative skills

Capacity	Facilitating Pedagogy	Facilitating Institutional Practice
communicate well in a variety of settings, to a range of individuals and groups, using various modes	"across the curriculum" teaching in both general education and the majors. Writing for many purposes, oral presentations, etc. practiced in both lower and upper division courses	WAC and other "across the curriculum" practices supported through faculty development and broad support of communication goals.
understand and employ both qualitative and quantitative analysis to represent and solve problems	experiences in quantitative and qualitative analysis in both gen. ed. and the major. Courses designated as responsible for this goal	technology to support quantitative analysis
discerningly use, evaluate and interpret complex information from a variety of sources	emphasis on analysis in writing, discussion, and group work	library orientation and class work to evaluate sources of information including print and electronic media.
extract intention from chaos, integrate disparate elements, and understand complex systems	experiences in solving unscripted, real-world problems and working in professional settings through internships or service learning	well-developed procedures for student placement into internships and service learning settings; faculty development in use of problem-solving for learning
transform information into knowledge, and knowledge into wisdom	activities that demand application of knowledge	faculty development to foster higher levels of student cognition

demonstrate intellectual resilience and flexibility	"spontaneous" problem- solving, especially in low- stakes settings	faculty development to promote more synthesis in student work
understand and manage change		institutional advising systems to assist students in creating a powerful "learning and career plan"
creatively solve complex problems by employing a variety of modes of inquiry	experiences in solving unscripted, real-world problems and working in professional settings through internships or service learning	Interdisciplinary studies supported; goal of ability to solve complex problems shared and evaluated by all faculty
be meaning makers in addition to information gatherers	frequent activities in both gen. ed. and the major that demand application and analysis levels of cognition	
work well in teams, including those of diverse composition, and build consensus.	experiences in class and off- campus in team work	faculty development to promote use of teams and develop ability to assess individuals working on teams

Area of Investigation	Facilitating Pedagogy	Facilitating Institutional Practice
human imagination, expression, and the artifacts of cultures	experiences that foster sophisticated cognitive, affective, and psychomotor outcomes. Assessments that verify student achievement and growth. Integrative, comparative, and inquiry-based approaches. Mastery developed in a major area	A general education program with goals that are shared by all. Students understand the "why" of general education and experience the value it adds to their entire undergraduate education. Major study that collaborates and integrates with gen. ed. study
means of modeling the natural, social, and technical worlds	ditto	ditto
the values and histories underlying American democracy	ditto	ditto
global and cross-cultural communities	rich, meaningful interactions both on- and off-campus; time spent living and learning in another culture; language study and practice	programs of study that promote global and cultural learnings; campus culture changed as students return and share new cultural experiences.
mutually supportive theory and practice.	Shared content for all college courses: "theory and practice" serves as one definition of college-level learning implies greater expectations for all college students. Applied projects, field-based learning.	programs that connect high schools and colleges so that all understand what learning is expected in each setting.  Expectations raised, excellent support systems available for all students.

#### The Responsible Learner: reflecting upon values and exercising social responsibility

Responsibility Expected	Facilitating Pedagogy	Facilitating Institutional Practice
to intellectual honesty	modeling and appropriate demands by faculty	modeling by administrators, staff, and board of trustees
to ownership and engagement (e.g., of on- going learning)	experiences that encourage independence in learning and consistent reinforcement to promote a developing commitment to self-directed learning	
to responsibility and a sense of accountability	modeling and appropriate demands by faculty; collaborative projects; co-curricular activities that address values and ethical reasoning	
to active participation as a citizen of a diverse democracy	modeling and appropriate demands by faculty; service learning and community service	programs established to facilitate placements in service learning and community service
to the interaction of local and global	significant study abroad; service learning, community service, internships, and volunteer work that engage the student in global communities and issues	appropriate programs established

to the respect and appropriate use of the human aspects of learning (intuition, feeling, as well as thinking)	recognition of "affect" as a (the most?) powerful influence in all human endeavor. Teaching that models and develops thoughtful emotional response to learning in all areas.	Student services that address student needs, create both challenging and supportive campus culture.
to discerning the consequences, including ethical consequences, of decisions and actions	Ethics as a shared goal of all faculty; multi-faceted approach to value-based and ethical reasoning in many courses.	Institutional modeling of ethical behavior,
to understanding themselves and their complex identities	use of assignments that require self-analysis and reflection upon a wide variety of issues and subjects	
to embodying a whole person, with interconnected habits of mind, heart, and hand	service learning, community service, internships, volunteer work; systematic reflection on learning issues encountered in the field	infrastructure that supports a variety of "real world" program placements

## SECTION THREE: SUGGESTIONS OF PEDAGOGICAL AND INSTITUTIONAL PRACTICES FROM SOURCES CLOSE TO GREATER EXPECTATIONS

Practices in pedagogy and institutional structure are also suggested directly and indirectly in other work associated with Greater Expectations. In January, the National Panel heard from the Greater Expectations Project on Accreditation and Assessment (PAA). PAA has basically reached agreement on the following important practices (excerpted from *Blueprint: Principles for Curriculum Design* and *Liberal Education Outcomes for the 21st Century*, PAAnet, 1-20-01):

- Liberal Education in the 21<sup>st</sup> century is constituted by collaboration between and integration of general education and the major (or professional program)
- The Gened component of the degree... is RIGOROUS and COHERENT.... is PURPOSEFUL....adds BREADTH.
- The MAJOR or professional program has a design that aims both at mastery of one particular field and at preparing students to cope with the intellectual complexity of the 21<sup>st</sup> century... It structures interactions with other disciplines... Its outcomes include abilities to translate from other disciplines to the home discipline, to critique materials from other disciplines, and to connect learning into syntheses across disciplines. Obviously semester-by-semester collaboration between general education and the major promotes progress on all of these outcomes.
- The institution's commitment to ongoing QUALITY enhancement requires ASSESSMENT of student learning in gened, the majors, and in their collaboration. Accomplishing this involves clear and explicit articulation among institution-specific learning outcomes, curriculum design, pedagogy, and assessment methods.

Core proficiencies developed through constant practice all across the curriculum:

- communication (speaking, listening, writing, reading, visual, artistic),
- reasoning (qualitative and quantitative),
- information literacy (access, evaluate, and use information, skill in determining which sources to consult),
- ability to be resourceful, flexible, and adaptable
- ability to apply knowledge appropriately



Inquiry Capacities (developed through expertise in a major, engagement in various types of disciplinary inquiry, integrative work in connecting courses and fields) including:

- critical thinking
- intellectual creativity
- lifelong learning
- systemic thinking
- scientific reasoning
- historical perspective
- aesthetic appreciation

From General Education: the Changing Agenda, by Jerry Gaff, published 1999, by AAC&U

(excerpts from pages 4 -6)

In recent years, considerable research on the undergraduate experience has emerged, and this research has led to various new approaches to the curriculum. For example, Astin (1994) demonstrated that involvement–referring to factors such as academic relationships with peers, informal relationships with faculty, and time spent in studying -- is key to student learning. Thus there has been considerable interest in various sorts of learning communities....

Likewise, research supports the effectiveness of active learning approaches, such as experiential and service learning, internships, collaborative group projects, and case studies.

Today, it would be irresponsible for a campus committee to concentrate on *what* is to be learned to the exclusion of *how* it is to be learned. Thus many institutions have developed curricular schemes that not only specify content but that also involve active and collaborative approaches to learning or that include built-in experiential components.

Quite simply, it would now be unrealistic for curriculum designers to neglect topics such as race, ethnicity, religion, class, and gender in new designs for general education. (See below for suggestions for diversity curriculum from another AAC&U project)

...the bar of competence has been raised. Indeed, computer literacy now refers to the ability to utilize the computer and other technology as meaningful tools for analysis and study... the explosion of information makes it essential for faculty to help students evaluate sources, question the validity of claims, and make connection among diverse data sets. Although the technology is new, the perennial task of education, making meaning and assessing truthfulness and utility of assertions, remains.

Curricular recommendations from American Commitments as summarized in Diversity Digest, Winter 1997, available at http://www.diversityweb.org/Digest/W97/currrec.html

American Commitments project has recommended that students engage diversity in learning, and in a variety of educational contexts, across the college experience. The National Panel stresses that education for U.S. democratic pluralism is not the same task as education for global knowledge. These American Commitments recommendations focus on education for U.S. cultural and democratic pluralism.

#### Student learning should explore:

- 1. Experience, Identity, and Aspiration: The study of one's own particular inherited and constructed traditions, identity communities, and significant questions, in their complexity.
- 2.United States Pluralism and the Pursuits of Justice: An extended and comparative exploration of diverse peoples in this society, with significant attention to their differing experiences of U.S. democracy and the pursuits—sometimes successful, sometimes frustrated—of equal opportunity.
- 3.Experiences in Justice Seeking: Encounters with systemic constraints on the development of human potential in the United States and experiences in community-based efforts to articulate principles of justice, expand opportunity, and redress inequities.
- 4.Multiplicity and Relational Pluralism in Majors,
  Concentrations, and Programs: Extensive participation in forms of learning that foster sustained exploration of and deliberation about contested issues important in particular communities of inquiry and practice.

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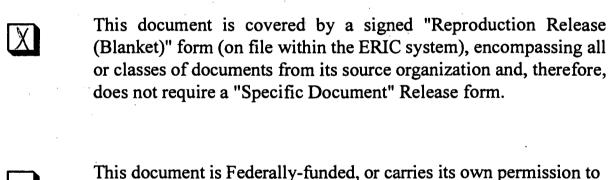
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